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Patent Plaque



### JP60242041A2: REINFORCING METHOD FOR FLEXIBLE GRAPHITE SHEET

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Country

JP Japan

Kind

Inventor(s)

FUKUDA HIROYUKI  
SHIGETA MASATOMO  
KAJI HISATSUGU  
SAITO KUNIYUKI

Applicant(s)

KUREHA CHEM IND CO LTD  
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Application Number

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IPC Class

**B29C 67/14; C01B 31/04; C04B 41/83; H01M 8/02; C08J 5/24; B29L 7/00;**

Abstract

**Purpose:** To improve strength and gas permeability, by a method wherein a flexible graphite sheet is impregnated with a specified liquid thermosetting resin under a reduced pressure, and the resin is hardened by heating.

**Constitution:** The flexible graphite sheet preferably degassed is placed in a liquid thermosetting resin having a carbonization rate of not lower than 20%, preferably, a phenolic resin adhesive or an epoxy resin adhesive, then the ambient pressure is reduced, and upon the starting of gasification of low boiling point components in the liquid, the pressure is returned to a normal pressure, then the pressure is again reduced, and these operations are preferably repeated several times to impregnate the sheet with the resin in an amount of 0.5W20wt% based on the sheet. Thereafter, the sheet is taken out, the liquid adhered to the surface of the sheet is removed, and the resin is hardened by a hot press to reinforce the sheet. **USE:** Heat-resistant packings, separators for fuel cells or the like.

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CHEMABS 104(10)073772D

Foreign References

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**Reinforced flexible graphite sheet**

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Inventor(s): FUKUDA HIROYUKI (JP); SHIGETA MASATOMO (JP); KAJI HISATSUGU (JP);  
SAITOH KUNIYUKI (JP)  
Applicant(s): KUREHA CHEMICAL IND CO LTD (JP)  
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**Abstract**

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Disclosed herein is a reinforced flexible graphite sheet uniformly containing a thermosetting resin prepared by impregnating a flexible graphite sheet with a liquid thermosetting resin having the carbonizing yield of more than 20% under a reduced pressure and thereafter, heat-setting the resin, an amount of the resin impregnated being in the range of 0.5 to 20% by weight based on the flexible graphite sheet.

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LERNER AND GREENBERG P.A.  
P.O. BOX 2480  
HOLLYWOOD, FLORIDA 33022  
TEL. (954) 925-1100